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Citation: Vukovic, Darko B., Maiti, Moinak, Vujko, Aleksandra and Shams, Riad (2019) Residents' perceptions of wine tourism on the rural destinations development. British Food Journal, 122 (8). pp. 2739-2753. ISSN 0007-070X

Published by: Emerald

URL: https://doi.org/10.1108/BFJ-04-2019-0291 <https://doi.org/10.1108/BFJ-04-2019-0291>

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Residents' perceptions of wine tourism on the rural destinations development

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Abstract

Purpose

The purpose of this research is to study the impact of wine tourism on rural destination development. Consequently, this study attempts to develop contemporary insights on this under-researched area such as residents' perceptions in wine tourism and its impact on the rural destinations development.

Method/Approach

In this study we used structured survey questionnaire from random sample of 318 respondents based on the Fruška Gora Mountain in Serbia. Research also used Structural Equational Modelling (SEM) for empirical econometric testing in this data sample. This technique is appropriate for multivariate analysis.

Findings

Personal resident benefit associated with wineries is positively related to Resident perceived economic impact (H1) R^2=0.624; Socio-cultural impact (H2) R^2=0.685 and environmental impact (H3) R^2=0.716 of wineries on local communities. Looking at the path diagram, we concluded that personal resident benefit associated with wineries is strongly related to resident perceived impact of wineries on local communities as regression weights are higher. Other findings relate those residents' positive perceptions of wine tourism increases in sales revenue, environmental protection, intrapersonal & interpersonal communication.

Research Implications

The positive attitude of the local population is an essential link of development. Such understanding of residents' perceptions optimizes destination management in the future and more importantly, local sustainable development. This has high policy implications.

Originality/value

The present study contributes to the scientific circles by connecting perception research with wine tourism.

Keywords: Wine tourism, rural destinations, impact, rural development

Introduction

Wine tourism is one of the most important resources in the wine industry. It depends on the territorial system, generating success with the operational synergies of various actors in their extended wine supply chain or network (Tommasetti, Festa, 2014). This type of tourism has two characteristics: 1st it has importance as tourism (or touristic potential) and, 2nd it promotes wine production. Both are significant in generating revenue for a local

community, region or the state. Today, there are numerous definitions of wine tourism, but mostly they consider visiting of tourists to different wine manifestations, cellars and wineries with the aim of tasting wine.

Definitions have different elements, taking into account the motivation for visiting a wine event or destination. That can be: recreational activity (Johnson, 1998), wine tasting (Hall et al., 2000), specific destination and cultural heritage (Sotiriadis, 2017; Serravalle et al., 2019; Giacosa et al., 2019), market (microeconomic) elements (Getz, Brown, 2006), service experienced (McDonnell, Hall, 2008), branding and marketing strategies (Galati et al., 2016; Galati et al., 2017; Scorrano et al., 2018; Scorrano et al., 2019), successful organizational models (Galati et al., 2017b), hedonistic experience (Festa et al., 2015; Festa et al., 2017; Thanh and Kirova 2018) and many others. In many of these studies, the destination is a major factor in wine tourism and the wine marketing is a key tool in their development. This relationship includes all stakeholders to promote business success (wineries) and economics success of territory (locality) (Galati et al., 2014). This increasing attention on wine tourism is influenced from the new, significant and the most dynamic form of tourism, from one side, and because of industries and stakeholders needs for new patterns of supply system to satisfy demand in tourist consumption, from other side (Rossi et al., 2014). However, the development of wine tourism is not only spontaneous; it is a process that is supported by the business relational view with the entrepreneurial (managerial) dynamics in socio-economic contexts (Festa et al., 2015). Such process also strongly influence on development of new tourism sector, such as agro tourism or rural tourism. Bearing in mind all of these, wine tourism start to be the pillar of rural destination development.

Many theorists consider wine tourism to be the backbone of rural development (Hall, Mitchell, 2001; Hjalager, Richards, 2002; Charters, Pettigrew, 2005; Wolf, 2006; Vujko, Gajić, 2014; Vujko et al., 2016; Petrović et al., 2017) and more and more people are called wine tourists (MacLeod, Hayes, 2013). However, although in expansion (Bruwer, 2003), there is still not enough literature dealing with this topic. To see the impact of wine tourism on the rural destination, we had to use the field work and examine residents' perceptions of wine tourism development, taking into account that local people opinion are a main determinant for successful tourism (Gursoy, Rutherford, 2004). Wine tourism residents' perceptions have been assess in terms of personal benefits (McGehee, Andereck, 2004), economic impact, socio-cultural impact, and environmental impacts (Gursoy, Rutherford, 2004; Byrd et al., 2009). In the studies of Vujko et al. (2018a; 2018b), it was point out that tourism in rural areas is gaining significant importance, while the study of Everett and

Aitchison (2008) claims that that rich gastronomic offer has an impact on the creation of a positive image of tourists about the places in which they have stayed. Moreover, tourists are always happy to return to places on for which the experiences were complete (according to same authors, 2008). Residents' perceptions of wine tourism can help local stakeholders and policy makers in terms of investment direction (Shams, 2016a; 2016b; 2017; Shams & Thrassou, 2019). It should be pointed out, for the areas with a possibility of developing wine tourism, should be a priority for the state's investment (Vujko, Gajić, 2014). In the case of Serbia, the wine region of Fruška Gora Mountain is such destination. Historically, there are two sectors in regional wine production. The first one is Old World in wine production, where belong: France, Spain and Italy (Tommasetti, Festa, 2014). In this group, we can add: (with lesser degree) Greece, Portugal, Hungary, Austria and Germany. New World in wine production include: Australia, New Zealand, Argentina, United States, Chile and South Africa (Bernetti et al., 2006). These countries, especially with the Anglo-Saxon origin, have the most developed wine marketing and communication strategies. Historically and geographically, Serbia belongs to Old World in wine production, but since it has a much smaller production of wine in relation to the previously mentioned countries, it has not previously mentioned in this classification.

We modified the questioners which are used by Xu et al., (2016) in their case study, covering a set of environmental impacts, personal benefits, economic and socio-cultural impact in Fruška Gora Mountain. We choose wine regions of Fruška Gora Mountain to study due to the following characteristics: rich, fertile mountain, spiritual jewels, wine tours and out of five it is one of the very important region for wine production[1]. Fruška Gora wines were so high quality and recognizable, that they were exported back to the 15th century. Furthermore, the city Sremski Karlovci in Fruška Gora was considered the Serbian capital of wine. Serbia constitutes the largest territory of the former Yugoslavia, it has more than 70,000 hectares of vineyards that produces around half a million tons of grapes annually[2]. The tradition of wine making is over 1000 years old among Serbians, and if one looks into the history it starts from the Nemanjic dynasty (the twelfth century) and continues still today. Historically, Serbian wine industry shows significant growth since 11th century as an evidence several annual wine based festival (Vino (2004); Beo Wine Fair (2010) etc.) organised from 2004 in Belgrade. Major varieties of wines are producing in Serbia including: Belgrade Seedless, Prokupac,

[1] https://balkaninsight.com/2011/06/07/fruska-gora-wine-wilderness/ accessed on 24/07/2019
[2] http://vinabalkan.ee/eng/veinikelder/serbia-kui-veinimaa/ accessed on 24/07/2019

Sauvignon, ‘Italian Riesling’, Cabernet, Chardonnay, White and Red Burgundy, Hamburg, Muscat, Vranac, Tamjanika, Krstač, Smederevka, and Dinka; and majority of them are produced in the local wineries. Among these, Prokupac (Red Wine) and Tamjanika (Muscat Blanc) considered being the oldest variety. White wines constitute around 60% and red wine constitutes rest of the total wine production in Serbia. Very specific wine of Serbia and studied region is Bermet. It is an aromatic wine that is obtained by maceration of more than 20 different grasses and spices.

The novelty of this research is in use of the SEM technique that estimates multiple and interrelated dependences among the variables in a single analysis. Until now, the SEM technique has never been applied in studies covering a sample collected from a region of a wider area of South-Eastern Europe. The main implication of this research is in the context of high importance of wine tourism in regional, domestic and international benefits of such economic activity. Wine cellars as a tourism potential, has a multiplier effect, affecting economically both the population of the individual locality and the region or state as a whole. All stakeholders feel the positive impact, from food entrepreneurs (wine cellars), catering providers, local residents, government (local and central) and other connected industries. An especially positive effect concern to "sent" a positive image of a destination to the international market (*What my region makes recognizable*), which would be achieved in this case by developing a specific wine brand (Bermet). Rest part of the paper is structured as follows: literature review; Data & methodology; Result and discussions; and finally with conclusions and policy implications.

Literature review

Perceptions are something inside of individuals, their observation or remark. It is personal experience, which can be different from person to person (Lindsay and Norman, 1977; Pickens, 2005; Xu et al., 2016). In contexts of our paper, perceptions are revised to understand how locals perceive the impacts of wine tourism of a given rural tourism development. In the research of Gursoy and Rutherford (2004), local economy could be strongly supported by tourism development where there are certain positive perceptions impacts on this development. Authors examined perceptions impact on economics, social, cultural and environmental development. Their findings of positive impacts of perceptions are only connected with residents who strongly support mass tourism and they see effects in the growth of the economy. Others, with the positive perceptions focus on social and cultural development support alternative tourism. Similar results are in the studies of Yoon et al.

(2001), Lee and Chang (2008), Byrd, et al. (2009), Xu et al. (2016). On all of these studies, there is strong connection between positive resident's perceptions and economy development.

However, residents that support cultural tourism believe that positive effects of perceptions are in alternative tourism. In the case of study Xu et al. (2016), economic and environmental effects are found in wine trails tourism. Similar study, done in Portugal by Correia et al. (2004), argued that there were positive perceptions of winery management on the economic development from wine tourism. Bearing in mind that perceptions expressing tendency that locals behave in certain way, this term "perceptions" are used as a base for many theoretical settings and are measured with similar items and scales (McGehee, Andereck, 2004; Andereck, Nyaupane, 2011). The main connection between perception and tourism was on potential positive impacts which destination has from the tourism development (Jafari, 1986). However, some authors have pointed out the negative effects of the tourism development on destination (Pizam, 1978; Belisle, Hoy, 1980). According to Xu et al. (2016), the *Social Exchange Theory* became an appropriate frame to grade residents' perceptions of tourism development because it explains individual decisions (Jurowski et al,, 1997; Jurowski, Gursoy, 2004; Andereck et al., 2005; Choi, Murray, 2010). According to this theory, individuals with positive attitude will believe in economic development supported by tourism (McGehee, Andereck, 2004; Andriotis, 2005; Wang, Pfister, 2008; Nunkoo, Ramkissoon, 2011).

Some wine tourism researchers, like Fox (2007), Björk and Kauppinen-Räisänen (2014), Thanh and Kirova (2018), studied wine tourism based on hedonism. According to Thanh and Kirova (2018), wine-consuming hedonists travel to distant destinations to try a new taste, a specific "note" that they later identify with "feelings, fun, and fantasy" fostered by the experience. The better the experience, it is the need to re-visit destination and as a result, the destination is increasingly listed on the wine tourism market. According to Fox (2007), gastronomic tourism and especially wine tourism, are becoming a "brand" of the state and something that a particular region is more visible. Sampaio (2012) found that there is the indirect influence of wine tourism to the destination branding (the case of island Madeira).In this study, the role of the manager is also important in this respect. Starting from Getz (2000) conceptualization of wine tourism perspectives, dividing it into three concepts on: a) wine producer; b) tourism agencies and c) consumers, the same author (2012) argued that wine tourism is a form of consumer behaviour and a marketing opportunity (Vukovic et al., 2012) for wineries. In the work of Del Vecchio, Secundo and Passiante (2018), it was claimed that tourism is becoming very important industry for regional socio-economic development,

where wine tourism is very is a very growing form of tourism. Even more, it is process of integration of different products and services and local stakeholders are directly and indirectly interested in the tourism value chain. Like any other product, wine tourism products and services require marketing support, strategies and logistics. Numerous studies have indicated this, where it stands out: the development of information and communication technology (in study of Del Vecchio et al., 2018), e-tourism support and assessing Web convergence (Buhalis, Law, 2008; Galati et al. 2016; Scorrano et al., 2019), the knowledge-intensive process and industry (Romano et al., 2014; Del Vecchio et al., 2018) and even more social media marketing (Facebook case) (Galati et al, 2017a). In the studies of Festa et al. (2015) and Galati et al. (2014) it was analyzed wine/territory, as a key driver in the wine marketing and found the link between locality and wineries and business success. Many other studies (Fernandez Olmos, 2011; Galati et al., 2017b) found that a company's level of investment in wines advertising influence on company's performance.

High quality wines, autochthonous varieties and specific wine flavors can be the main generators of tourism in the region. In a study of Björk and Kauppinen-Räisänen (2014), the local population contribute to the specificity of the wine taste (special recipes), which also affects visitation and destination development. Families (wine tourism entrepreneurs) are using "secret recipes" that make their wines very specific and known, which influence on tourists to visit such wine regions to try wines. A similar example is Serbian sweet wine Bermet, enriched with several indigenous herbs and spices, produced only in Fruška Gora Mountain. Residents' perception of personal benefits from tourism is also important research question. According to research of Wang and Pfister, (2008), small rural communities have positive attitudes of tourism development (Petrovic et al., 2017). This study is also important to use, due to the reason that was conducted in small rural area where tourism was in emerging stage. The study (2008) used social exchange theory where sociological tradition of social exchange is the most important factor to maximize self-interest after weighing all options.

According to these theoretical explanations, study develops three hypotheses as explained below:

1. H1: Personal resident benefit associated with wineries is positively related to Resident perceived economic impact of wineries on local communities.
2. H2: Personal resident benefit associated with wineries is positively related to Resident perceived Socio-cultural impact of wineries on local communities.

3. H3: Personal resident benefit associated with wineries is positively related to Resident perceived environmental impact of wineries on local communities.

In the case of our research, residents will support wine tourism development if they will have the benefits from such development (Perdue et al., 1990; Lankford, Howard, 1994; Andereck et al., 2005; Chen and Chen, 2010; Mendes, Duarte & Simoes, 2013). In the 1990s, researchers started focusing on the term sustainability of tourism development. In this concept, only sustainability is important (e.g., Milman, Pizam, 1988; Perdue et al., 1990). According to Xu and others (2016), at the level of perception, research moved from macro to micro approaches like personal benefit (McGehee, Andereck, 2004). Finally, according to Xu et al. (2016), it is important to say those residents' perceptions of tourism development and its impacts, has the ability to help local self-government. Also, this is ability to help the Government to set the direction of development and issues for appropriate official development acts, taking into account the numerous positive implications for rural, economic, social and cultural development.

Data & Methodology

This study is based on similar recent case-study published by (Xu et al., 2016). However, it is specific because of diverse geographical, climatic, economic and social environment. In addition, our study was analyzed by technique of Structural Equational Modelling (SEM), instead of reliability tests and multivariate regressions in Xu et al. (2016), or ANOVA test in Byrd et al. (2009) which consider similar objectives.

Fruška Gora Mountain was selected for this study because Viticulture in Srem region is one of the oldest in Europe. The Srem region has no sub-regions, and there are only the Fruška Gora Mountain vineyards. Moreover, since the Fruška Gora Mountain vineyard is very large, it is interesting to observe the localities within it, and above all the Sremski Karlovci, Irig, Banoštor, Banstol, and Neštin (rural destinations). They are represented by mostly white varieties of grapes. Fruška Gora Mountain is known as the area of Italian Riesling, but also for: Rajnski Riesling, Traminac, Chardonnay and Sauvignon, Frankovka, and several Serbian autochthonous varieties. In recent years, more and more vineyards with black varieties have also grown.

A survey was developed to collect information about residents' perceptions about wine tourism development. The survey was conducted in 2018, on the sample of randomly

chosen 328 tourists, originating from eight countries (Slovenia, Russia, Croatia, Italy, the Netherlands, the United Kingdom, Hungary and China). The interview was anonymous, i.e. the names of the examinees were not relevant for the selected data. The examination of the target groups was done using a “face-to-face” technique. We started from the assumption that wine tourism is the primary factor in the development of tourism in Fruška Gora Mountain. A survey is support by the fact that in recent years there has been an increase in the number of new wineries focused on tourism in this area. Our questionnaire took into account the age of the respondents (groups of 16- 25, 26- 35, 36- 45, 46- 55, < 56), family status (married, single, divorced, widow/widower) and education (from primary school, secondary school, semi-qualified, college, high qualified, faculty, to M.Sc. / Ph.D.). The reason for the grouping of respondents is associated with their sociological, cultural and economic characteristics.

Within the five-point scale, the item "Strongly agree" refers to the respondents' favourite opinions about the hedonistic food and wine from Serbia and the item "Absolutely disagree" refers to their unfavourable opinions. Bearing in mind that scale instruments to measure resident's perceptions of tourism development are not standardized yet (Lankford, Howard, 1994), we used earlier researches as a model, and modified it. In the term of Personal Benefits scale, we used items first suggested by McGehee and Andereck (2004) then adapted by Wang and Pfister (2008), Andereck and Nyaupane (2011), and also used by Xu *et al*. (2016). Our personal benefits scale included in the survey are: “My understanding of other cultures has increased”, “The quality of my personal life has improved”, “My property value has increased”, “I got in touch with others and expanded my business”, “My children will stay in the countryside to work”, “I care more about my community's cultural resources”, “I care more about my community's natural resources”, and “I feel my community is better place to live”. All personal benefits were measured using a Likert five-point scale (1 “strongly disagree”; 5 “strongly agree”). The Community Impacts scale used in the study are suggested by Xu and others (2016), and comprised 15 items representing three dimensions of impacts: Economic Impacts (6 items; e.g., “Tourist's spending”; “Variety of local business”, “Number of jobs”, “Real estate and property tax”, “Prices of goods and services”, and “Economic stability of the community”), Socio-cultural Impacts (5 items; e.g., “Variety of cultural activities”, “Conservation of local heritage”, “Sense of community identity”, “Quality of life of residents” and “Number of local recreational activities”), and Environmental Impacts (4 items; e.g., “Environmental consciousness”, “Health of local ecosystems”, “Parking problems” and “Quality of infrastructure”). Items were measured using a five-point Likert scale (1 “significantly decreased”; 5 “significantly increased”).

For empirical testing of data sample, we used Structural Equational Modelling (SEM) technique. Structural Equational Modelling (SEM) technique is used for multivariate analysis. Technically SEM combines factor analysis and multiple regressions in analysis. The advantage of SEM technique is that it estimates multiple and interrelated dependences among the variables in a single analysis, resulting researchers prefer SEM over other methods. In this study structured questionnaire with Likert Scale data is used and SEM deals well with similar kind of dataset. SEM is introduced by Cohen (1991). According to same author suggestion, the minimum R-square of 0.10, 0.25, 0.50.0.75 at a significance level of 5% for a statistical power of 80% shows that our sample size is adequate for SEM testing (we have much more than required minimum by Cohen (1991)). In the research of Sampaio (2012), SEM technique analyzed 303 completed questionnaires. Similar studies that have used SEM are conducted by Gursoy and Rutherford (2004), Kang et al. (2005), Yoon and Uysal (2005), Hsu & Huang (2010). The main reason of using this methodology in our study is because this technique analyzes complex relationships between observed and latent variables incorporating both direct and indirect effects in into analysis. Finally, one of the biggest reasons of justifying this technique of analysis is that analyzes intangible observations, such as perceptions. In this our analysis technique differs from studies of Xu et al. (2016) and Byrd et al. (2009).

Result and Discussion

Table 1 shows the descriptive statistics of the data.

Table 1: Descriptive Statistics

	No.	Missing	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
E1	10	0	4.289	4	1	5	0.768	1.073	-0.966
E2	11	0	4.179	4	1	5	0.795	1.128	-0.937
E3	12	0	4.151	4	1	5	0.856	1.747	-1.143
E4	13	0	4.157	4	1	5	0.781	1.125	-0.88
E5	14	0	4.126	4	1	5	0.867	1.595	-1.119
E6	15	0	4.088	4	1	5	0.842	1.875	-1.12

ES1	21	0	4.044	4	1	5	0.846	1.594	-1.025
ES2	22	0	4.094	4	1	5	0.892	1.035	-0.987
ES3	23	0	4.201	4	1	5	0.896	1.463	-1.199
ES4	24	0	4.135	4	1	5	0.871	1.569	-1.127
Gen	1	0	1.308	1	1	2	0.462	-1.311	0.835
Pb1	2	0	4	4	1	5	0.975	1.102	-1.065
Pb2	3	0	3.991	4	1	5	0.953	0.329	-0.878
Pb3	4	0	4.101	4	1	5	0.895	1.951	-1.204
Pb4	5	0	4.475	5	1	5	0.742	2.766	-1.534
Pb5	6	0	3.425	3	1	5	0.796	0.351	0.136
Pb6	7	0	4.418	5	1	5	0.721	1.715	-1.228
Pb7	8	0	4.509	5	1	5	0.823	2.394	-1.73
Pb8	9	0	4.047	4	1	5	0.832	1.865	-1.075
S1	16	0	4.088	4	1	5	0.853	1.662	-1.085
S2	17	0	4.126	4	1	5	0.845	1.826	-1.123
S3	18	0	4.211	4	1	5	0.899	1.458	-1.211
S4	19	0	4.091	4	1	5	0.84	1.753	-1.07
S5	20	0	4.085	4	1	5	0.852	1.675	-1.084

The first step of the analysis starts with measuring the reliability and validity of the instrument used in the study. Figure no. 1 confirms that the average loadings of the each constructs are higher than (0.62) and that confirms the convergent validity.

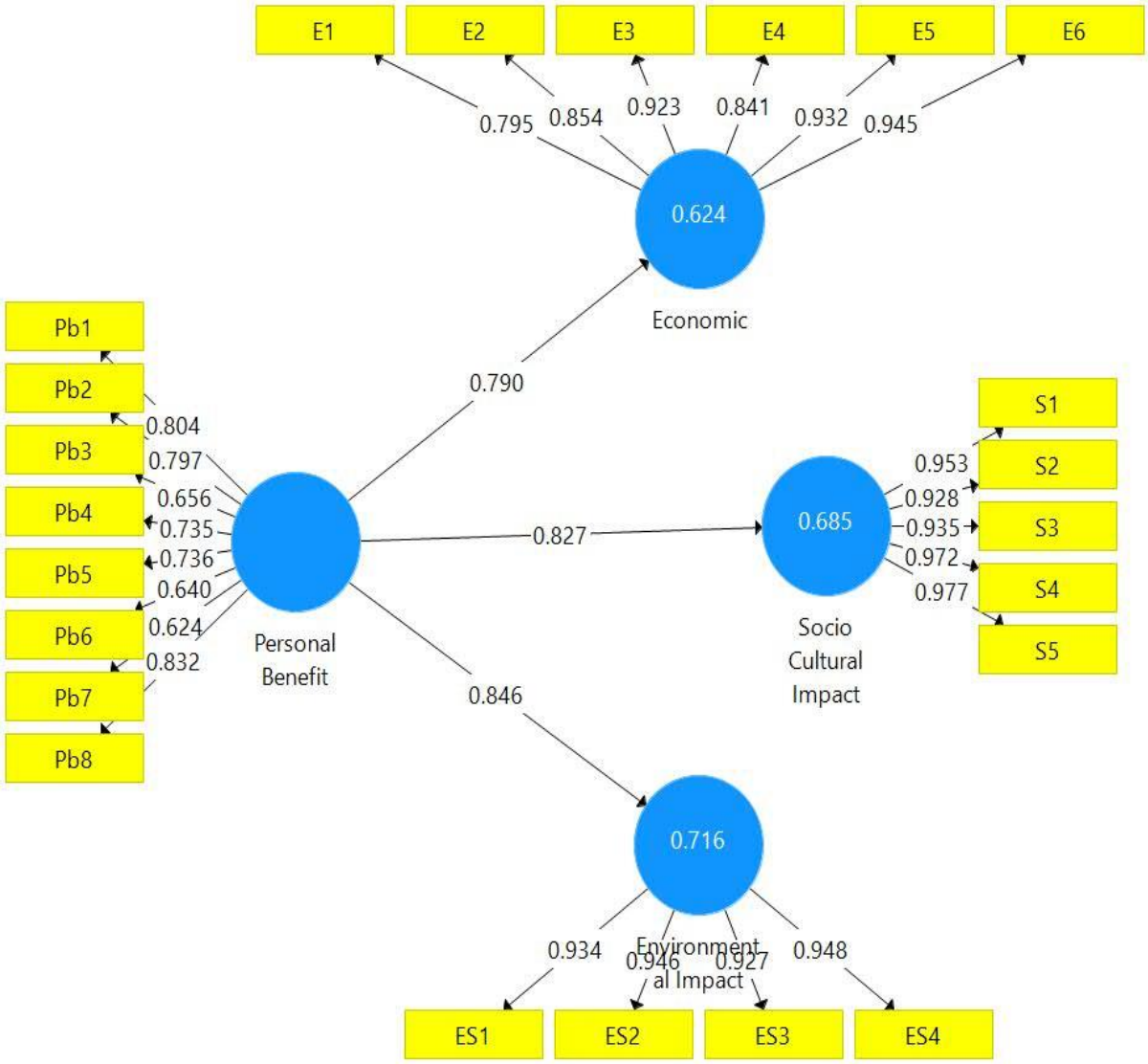

Figure 1: Relationship between Personal benefit, economic impact, socio-cultural impact and environmental impact (Structural Equation Modelling with the following variables along with their average loading is presented. Overall it represents multiple and interrelated dependences among the variables)

From table no. 2 study finds that Cronbach's Alpha value for Economic, Environmental Impact, Personal benefit and Socio cultural Impact are 0.943, 0.955, 0.878 and 0.975 respectively, that suggests that constructs are reliable. Any value of Cronbach's Alpha above 0.7 considered to be good for analysis data analysis. Further adjusted rho and composite reliability value also confirms the constructs are reliable. Above 0.9 value of composite reliability for all latent variables confirms the internal consistency. Average variance extracted value of more than 0.5 for all latent variables indicates the good acceptable level for convergent validity of the constructs.

Table 2: Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Economic	0.943	0.953	0.955	0.780
Environmental Impact	0.955	0.956	0.967	0.881
Personal Benefit	0.878	0.929	0.901	0.536
Socio Cultural Impact	0.975	0.976	0.980	0.909

To check the discriminant validity Fornell-Lacker (1981) criteria is used. Table no. 3 show the results obtained for the Fornell-Lacker (1981) criteria, which indicates that the construct loading are higher than 0.7 for all cases.

Table 3: Discriminant validity (Fornell-Larcker Criterion)

	Economic	Environmental Impact	Personal Benefit	Socio Cultural Impact
Economic	0.883			
Environmental Impact	0.948	0.939		
Personal Benefit	0.790	0.846	0.732	
Socio Cultural Impact	0.962	0.967	0.827	0.953

Table no. 4 confirms that there exists no multi-collinearity among the constructs as VIF value is 1.

Table 4: Inner VIF

	Economic	Environmental Impact	Personal Benefit	Socio Cultural Impact
Personal Benefit	1.000	1.000		1.000

Above all results gives enough evidences about the reliability and validity to run SEM for analysis and check our study hypothesis. To check the model fitness partial least square (PLS) technique is used, Table no. 5 and 6 details about the R-squared values and different model fitness criteria obtained. R-square value of more than 0.6 together with the different model fitness criteria of table no.6 confirms an applicable model fit. According to (Henseler et al., 2016) SRMR is the only approximate model fit criteria for PLS and a value of 0.162 SRMR suggests an applicable model fit to the data.

Table 5: R-Square Value

	R Square	R Square Adjusted
Economic	0.624	0.623
Environmental Impact	0.716	0.715
Socio Cultural Impact	0.685	0.684

Table.6 : Model Fit summary

	Saturated Model	Estimated Model
SRMR	0.101	0.162
d_ULS	2.833	7.246
d_G1	3.301	3.832
d_G2	2.396	3.223
Chi-Square	2,279.562	3,158.499
NFI	0.789	0.708

To validate the R-square value and model fitness criteria, study runs bias-corrected and accelerated (BCa) bootstrapping at 95% significance level with 1000 subsamples. The bootstrapping results are shown in tables no. 7.1 to 7.5. All the p values are significant and t-statistics are meaningful in Tables no. 7.1 to 7.5 that indicate study hypothesis are accepted.

Personal resident benefit associated with wineries is positively related to Resident perceived economic impact (H1) R^2=0.624; Socio-cultural impact (H2) R^2=0.685 and environmental impact (H3) R^2=0.716 of wineries on local communities. Looking at the path diagram (Figure 1) one can conclude that personal resident benefit associated with wineries is strongly related to resident perceived impact of wineries on local communities as regression weights are higher.

Table 7: bootstrapping

Table 7.1: Boot Strapping results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Personal Benefit -> Economic	0.79	0.794	0.019	41.754	0
Personal Benefit -> Environmental Impact	0.846	0.848	0.016	51.922	0
Personal Benefit -> Socio Cultural Impact	0.827	0.829	0.019	43.92	0

Table 7.2: R-Square Value

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Economic	0.624	0.630	0.030	20.794	0.000
Environmental Impact	0.716	0.719	0.028	25.959	0.000
Socio Cultural Impact	0.685	0.688	0.031	21.945	0.000

Table 7.3: SRMR Table

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)
Saturated Model	0.101	0.034	0.004	27.440
Estimated Model	0.162	0.048	0.007	23.263

Table 7.4: DG_1 Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Saturated Model	3.301	0.502	0.121	27.378	0.000
Estimated Model	3.832	0.627	0.160	23.939	0.000

Table. 7.5: DG_2 Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Saturated Model	2.396	0.273	0.052	46.401	0.000
Estimated Model	3.223	0.262	0.051	63.094	0.000

Conclusion and implications

Fruška Gora Mountain as region is traditionally a significant wine producer in Serbia. Considering its geographical position, relief, climate and cultural heritage, it has created many recognizable, authentic wines, which are served in restaurants, family farms and wine cellars. However, these potentials are not sufficiently utilized for the development of tourism, although they represent significant potential. This region has several traditional business sectors in tourism with opportunities for global competitiveness, but also the ability to develop completely new sectors in view of changes in the global tourism market. Priority should be given to those sectors in which this region has the strongest attractiveness and

where it can quickly build its own competitive advantages in such a way that products and services are modelled on competitors, or even better, in a way completely different from the competition, that is, by installing one's own identity. Wine tourism represents a base for the development of tourism in Serbia. Such an approach should enable a significant affirmation of wines from this region and show this geographical area as an important gastronomic destination and thus contribute to the growth of the regional economy.

Our study analyzes delicate residents' perceptions of wine tourism in region of Serbia, where viticulture has a long history. Specifically, this study found that local government should increase their efforts to provide everything necessary for the development of wine tourism. Study result shows that the positive attitude of the local population is an essential link of development. Such understanding of residents' perceptions optimizes destination management in the future, and more importantly, local sustainable development. Finally, our study contributed to the scientific circles by filling an important gap that connects perception research with wine tourism for rural development. The present study leads important guidelines for the future researches that could help in identifying residence perception about other particular product or services which are specific to a region and that are neglected or not identified. Identification of such particular product or services which are specific to a region could become the vehicle for rural development.

Like many other studies, this one is also not free of limitations. The main limitation in the research and our suggestion for future research is to increase the sample size of tourist respondents, so examination of their attitudes and role in wine tourism might reach higher significance. The next one matter that we would like to express is local character of our research (with a specific region case), so the future research should involve other rural areas. For example, in other regions of Serbia there are numerous wineries and cellars that are visited on a tourist basis, however in this research we presented the region of Fruška Gora which is the only one producing specific Bermet and wine tourism is the primary factor in their tourism development. Also, wine tourism is not the primary development factor in other Serbian regions (they are out of the analyzed area in this study). We can observe multiple Implications of our research:

1. The findings of this study can assist to policy makers in construction and implementation of wine tourism strategy in wine-producing regions. The economic effects are manifold with personal (entrepreneurs and managers - wine cellar owners) benefits, local development benefits and regional (or state) economic development. These findings are consistent with the researches and

results of Lindsay and Norman (1977), McGehee and Andereck (2004), Andriotis (2005), Pickens, (2005), Byrd, et al. (2009), Chen and Chen (2010) Mendes et al. (2013), Sampaio (2012), Xu et al. (2016), and especially of Gursoy and Rutherford (2004) and Wang and Pfister (2008). The findings confirm our 1st hypothesis. Highlighted feature is also marketing opportunity for wineries and the destination branding.

2. Regards socio-cultural impacts of wineries on local communities, our results consistent with studies of Gursoy and Rutherford (2004), Yoon et al. (2001), Lee and Chang (2008), Byrd, et al. (2009), Xu et al. (2016). Socio-cultural development is often one of the most important factors of preferred destinations for tourist visits and residents living (according to the 2nd hypothesis). Moreover, this is main developing feature in the most emerging destinations (uncharacterized by mass tourism).
3. Environmental protection is one of the most important goals of every government (local, regional or state). Unlike mass tourism, with sometimes negative consequences for the environment, wine tourism is characterized by enjoying nature, environmental protection and creating a brand of natural environment. Similar findings are confirmed in studies of Correia et al. (2004), Sampaio (2012), Xu et al. (2016) (according to our 3rd hypothesis).

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Acknowledgment: Authors would like to thank Russian Foundation for Basic Research for the financial support provided within the project No. 17-22-07001-ОГН "Complex algorithm for cultural regeneration of minor industrial cities within the context of agglomeration processes in Russia and Europe", to Ministry of Education, Science and Technological Development, Serbia (Grant No. III 47007); and to RUDN University in Program 5-100 in Russian Federation.